

What is claimed is:

1. A method for referring to digital watermark information in a mark image, the digital watermark information being embedded in the mark image, processing being performed with reference to the digital watermark information,

wherein the digital watermark information comprises referred data, and an action definition that includes an action class and an index of the referred data as a parameter,

said method comprising a step of referring to said action definition; and a step of referring to said referred data through the index included in the action definition to perform processing defined by the action class.

2. A method for referring to digital watermark information in a mark image according to Claim 1, wherein:

said action definition defines an action executed when a menu item is pointed, and includes names of menu items as labels.

3. A method for referring to digital watermark information in a mark image according to Claim 1, wherein:

said action definition defines an action that displays a text; and

data that is referred to through the index is a text

to be displayed.

4. A method for referring to digital watermark information in a mark image according to Claim 3, wherein:

5 said text comprises fixed information common to the same mark and information that is variable for each mark provider who attaches the same mark.

5. A method for referring to digital watermark information in a mark image according to Claim 1, wherein:

10 said action definition defines an action that obtains another Web page, which is different from a Web page to which said mark image is attached, and displays said another Web page; and data that is referred to through the index is URL representing a location of said another Web page.

15 6. A method for referring to digital watermark information in a mark image according to Claim 1, wherein:

20 an action defined by said action definition is off-line authentication by comparing URL representing a mark provider in the digital watermark information with URL of a Web page to which the mark image is attached and by checking them.

7. A method for referring to digital watermark information in a mark image according to Claim 6, wherein:

25 as a result of the off-line authentication, an action defined by said action definition warns an

authentication server of discrepancy of both URLs.

8. A method for referring to digital watermark information in a mark image according to Claim 1/ wherein:

5 an action defined by said action definition is on-line authentication by inquiring of an authentication server whether or not URL representing a mark provider in the digital watermark information is an appropriate mark provider.

10 9. A transmission medium in which a mark image and digital watermark information embedded in the mark image are transmitted via a network,

15 wherein the digital watermark information has a data configuration comprising an entity item for storing referred data and another entity item of an action definition that includes an action class and an index of the referred data as a parameter.

20 10. A transmission medium transmitted via a network, wherein said transmission medium includes a browser for browsing a Web page and performing the following processing functions with reference to digital watermark information embedded in a mark image:

25 said digital watermark information comprises referred data, and an action definition that includes an action class and an index of the referred data as a parameter;

the action definition is referred to;

the referred data is referred to via the index
included in the action definition; and

processing defined by the action class is

5 performed.